



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,348	07/23/2001	Randall Lee Carter	RD-27764	2297

6147 7590 04/23/2003

GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH CENTER  
PATENT DOCKET RM. 4A59  
PO BOX 8, BLDG. K-1 ROSS  
NISKAYUNA, NY 12309

EXAMINER

KEEHAN, CHRISTOPHER M

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/910,348

Applicant(s)

CARTER ET AL.

Examiner

Christopher M. Keehan

Art Unit

1712

AS-7

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 33-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Election/Restrictions***

Claims 33-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

#### ***Claim Rejections - 35 USC § 103***

The rejection of claims 1-17, 20-25, and 30-32 under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (5,013,800) in view of Costanzi et al. (5,350,786) has been maintained and is as set forth in the previous office action.

The rejection of claims 18 and 19 under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (5,013,800) in view of Costanzi et al. (5,350,786), and further in view of Maguire et al. (5,034,061) has been withdrawn in light of a new rejection.

The rejection of claims 26-29 under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (5,013,800) in view of Costanzi et al. (5,350,786) has been withdrawn in light of a new rejection.

***Response to Arguments***

Applicant's arguments with respect to claims 1-32 have been considered but are not considered persuasive. Regarding applicant's arguments concerning the absence of a hindered amine light stabilizer (HALS) in Inoue, Inoue does disclose adding ultraviolet absorbers and aging retarders (as set forth in the previous office action). HALS are aging retarders, added to polymeric compositions exposed to ultraviolet (UV) light to protect the polymer from degradation. Costanzi et al. teach a known HALS. It appears within one skilled in the art to apply the known aging retarder of Costanzi et al. in the composition of Inoue. Applicant has argued that a HALS would not be effective in the invention of Inoue, as the temperature would render it ineffective. There is nothing in Costanzi et al. that teaches or discloses an effective temperature range for the use of the HALS, and one skilled in the art would not be deterred from selecting the aging retarder of Costanzi et al. to use in the invention of Inoue, as Inoue specifically discloses adding aging retarders, of which one is HALS. As applicant discloses on page 8, section 0022 of the specification, "The compositions of the present invention can be used in any application that requires a light-or heat stabilized polyorganosiloxane coating," which is clearly disclosed by Inoue. Contrary to applicant's assertions, it does not appear novel to use HALS with polyorganosiloxanes, as Karrer et al. disclose this in their composition (as set forth below). It appears applicant is referring to HALS at an elevated temperature, but there is nothing in the composition claims that claim elevated temperature, nor would temperature appear relevant to the

Art Unit: 1712

composition claims, as it is not clear how the intended use of the composition materially affects the overall claimed composition.

### ***New Claim Objections***

Claim 2 is objected to because of the following informalities: polyorganosiloxane is misspelled. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 26-29 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a HALS structure, does not reasonably provide enablement for what is attached to the HALS and where it is attached. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicant discloses a preferred HALS on page 8 of the specification. However, from the diagram, it is not clear what is attached to each side of the polyorganosiloxane and where it is attached, if at all. If not attached, then this structure would not be stable. If attached, it is not clear where and to what.

***New Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 27-29 recite the limitation "the methylsiloxane moiety" in claim 26. There is insufficient antecedent basis for this limitation in the claim.

***New Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Karrer et al. (5,792,825). Karrer et al. disclose a composition comprising a polyorganosiloxane and an admixed sterically hindered amine light stabilizer (HALS) wherein the polyorganosiloxane is free from alternating cyclic hydrocarbon residues (Example 2).

Art Unit: 1712

Regarding claim 2, Karrer et al. disclose wherein the polyorganosiloxane comprises moieties of  $[(CH_3)_2SiO]$  and a terminal trimethoxysilane unit  $[(CH_3)_3SiO_{0.5}]$  (Example 2).

Regarding claim 6, Karrer et al. disclose a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker (Example 2). It is the examiner's position that the Karstedt catalyst of Karrer et al. is a non-cyclic vinylsiloxane (see Karstedt, U.S. 3,775,452).

***New Claim Rejections - 35 USC § 103***

Claims 3-5, 7-17-25, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karrer et al. (5,792,825). Regarding claims 3-5, 7-9, 15-17, and 20-22, Karrer et al., as applied to claim 1 above, are as set forth and incorporated herein. Karrer et al. do not appear to specifically disclose the instantly claimed mole percentages. However, Karrer et al. do disclose added amounts (Example 2), which appears to be a result-effective variable. Therefore, as applicant has shown no criticality as to the instantly claimed amounts, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the instantly claimed amounts through routine experimentation. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Boesch*, 205 USPQ 215. It has been held that where the general conditions are disclosed in the prior art, it is not

Art Unit: 1712

inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233, 235.

Regarding claims 10-13, Karrer et al. do not appear to specifically disclose the amounts and types of fillers. Karrer et al. do disclose adding fillers and additional reinforcing fillers (col.12, lines 6-21). It is the examiner's position that the prior art is replete with these types of fillers. Therefore, as applicant has shown no criticality as to the instantly claimed ranges, and the ranges are so broad, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added these fillers as taught by Karrer et al. in a variety of amounts, including that as instantly claimed, through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233, 235.

Regarding claim 14, Karrer et al. disclose a non-cyclic, vinylsiloxane fluid and an organohydrogen crosslinker, and a platinum catalyst (Example 2). It is the examiner's position that the Karstedt catalyst of Karrer et al. is a vinylsiloxane fluid with a platinum catalyst (see Karstedt, U.S. 3,775,452).

Regarding claims 18 and 19, Karrer et al. disclose the basic structure as instantly claimed (Example 2, the Karstedt catalyst). It appears that the only difference between the Karstedt catalyst of Karrer et al. and applicant's claimed structure is an extra siloxane group, denoted by n. Therefore, this appears to be an obvious homologue of Karrer et al.'s. Because the value of n provides for such a broad claimed range, from



Art Unit: 1712

100 cp to 200,000 cp, and as applicant has shown no criticality as to the instantly claimed range, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the structure of Karrer et al. to have achieved an at least similar viscosity because the claimed structure is at least similar to that of applicant's, and at least similar materials would have yielded at least similar results.

Regarding claim 23, Karrer et al. disclose the instantly claimed structure (Example 2). Karrer et al. do not appear to specifically disclose the x and y values being of sufficient value to provide the instantly claimed viscosity. As applicant has shown no criticality as to the x and y values, and Karrer et al. do disclose values for these units, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have adjusted the x and y values to a variety of values to achieve a certain viscosity, because these are the only values of Karrer et al.'s structure that can be varied.

Regarding claims 24, Karrer et al. disclose the instantly claimed units (col.7, lines 50-60). Karrer et al. do not appear to specifically disclose the instantly claimed ratio. However, as applicant has shown no criticality as to the instantly claimed ratio, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have achieved a variety of ratios, including that as instantly claimed, through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233, 235.

Regarding claim 25, Karrer et al. disclose an alkyl radical comprising 1 to 4 carbon atoms (col.7, lines 50-60 and col.1, lines 64-67).

Regarding claims 30-32, Karrer et al. disclose 0.04 to 20 milliequivalents of HALS, which appears to be included in the instantly claimed range (col.11, line 63- col.12, line 2).

Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karrer et al. (5,792,825) in view of Malik et al. (5,679,733). Karrer et al., as applied above, are as set forth and incorporated herein. Regarding claims 26 and 29, Karrer et al. disclose a HALS (as set forth above). Karrer et al. do not appear to specifically disclose the instantly claimed structure. Malik et al. disclose the instantly claimed structure as being a commercially available HALS (col.10, lines 40-45) for use with silicone polymers (col.13, lines 31-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the HALS of Malik et al. in the composition of Karrer et al. because Malik et al. teach that the instantly claimed HALS is commercially available and used with silicone polymers.

Regarding claims 27 and 28, it appears that Malik et al. do not disclose the instantly claimed limitations. However, as these limitations pertain to a commercially known HALS, these limitations could very well be inherently achieved as an inherent function of the HALS. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the HALS of Malik et al. to achieve at least similar results, because the materials of Malik et al. are at least similar to those as

Art Unit: 1712

instantly claimed, and at least similar materials would have yielded at least similar inherent properties.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (703) 305-2778. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Christopher Keehan *CMK*

April 9, 2003



Robert Dawson  
Supervisory Patent Examiner  
Technology Center 1700